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ABSTRACT

An evaluation was conducted of a safety education program developed by the Nassau County (New York) Board of Cooperative Educational Services for 166 special education teacher aides. The turnkey training safety program (TTSP) adapted an orientation program and an existing safety videotape and developed the "Information Handbook for Teacher Aides" to help prevent injury to aides as a result of acting-out behaviors of severely disabled students. Program activities began with the hiring of trainers and the development of the handbook. In the TTSP's third month, seven teams of turnkey trainers attended a 2-day orientation and training session to learn the strategies for peer training. Training of the 166 aides took place in the third and fifth months of the program. Participants completed assessment instruments that were developed as part of the program. Evaluation included comparison of numbers and types of accidents and injuries before training and after training in buildings where the training took place and in buildings that had no safety training program. There was a decrease in the number of accidents and injuries after training, which was accompanied by a decrease in the severity of injuries suffered. Participants rated the program highly and indicated their satisfaction with the information provided. Three tables and two figures accompany the study. (SLD)

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BOARD OF COOPERATIVE EDUCATIONAL SERVICES OF NASSAU COUNTY
Valentines Road and The Plain Road
Westbury, New York 11590

EVALUATION REPORT: TURNKEY TRAINING EXPANDED SAFETY PROGRAM FOR SPECIAL EDUCATION TEACHER AIDES

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Occupational Safety and Health Training and Education Program

March 1991

By

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I. PROJECT OVERVIEW

A. Purpose

The turnkey training safety program provided orientation and safety training for 166 special education teacher aides. The project accomplished the following objectives:

- Developed an **Information Handbook for Teacher Aides** to be used by teacher aides of unique special education populations;
- Developed a turnkey training program utilizing the safety training videotape and **Information Handbook for Teacher Aides**; and
- Trained 166 full-time aides at seven special education sites.

The turnkey training safety program adapted an orientation program (developed through a previously funded project) for use by teacher aides employed with unique special education populations. These materials met the need of teacher aides for orientation to the various problems of the unique populations of severely handicapped students who are served by Nassau BOCES. Specifically, the **Information Handbook for Teacher Aides** was expanded based on an earlier version developed in 1988-1989. The expanded version includes early childhood special education populations and, also, lower and upper elementary students with moderate to severe mental retardation, visual impairment, and multisensory hearing impairment. In addition, the training team served as readily approachable "in-school safety experts" thereby increasing opportunities for ongoing communication about safety throughout the school year.

In addition, teacher aides were provided peer-based turnkey training in behaviors, conditions, and strategies for preventing accident and injuries to special education personnel.

A unique aspect of this training model allowed teacher aides a fully integrated role in planning, implementing, and evaluating in order to maximize opportunities presented in a peer-based learning experience. This approach capitalized on aides' familiarity with job hazards, language and communication styles of unique student populations, and with acquaintance with co-workers at the school sites.

B. Background and Origins

The programs offered by the Division of Special Education provide comprehensive educational services for approximately 1,500 handicapped students, ranging in age from birth to 21 years. Services include developing Individual Educational Plans, Phase II development, academic education, life skills training, occupational awareness, job skills training, work-experience counseling, prehostel training, community-based training, travel training, community awareness, interscholastic sports, speech therapy, occupational therapy, physical therapy, music and art instruction, daily living skills, social and recreational activities, transitional (school-to-work) planning, and counseling.

Special education teacher aides are at serious hazard for accidents and bodily injury because of students' acting-out behaviors. The project was a result of the activities of the Safety Committee reflecting its concern for the safety of 100 full-time teacher aides working for school programs of the Division of Special Education of the Board of Cooperative Educational Services (BOCES) of Nassau County.

In 1988-89, the Nassau BOCES Division of Special Education used state funds to develop a videotape and an information handbook targeted for use by special education teacher aides. This current safety program expanded and adapted these materials and developed a turnkey training model to train teacher aides to be aware of behaviors, conditions and strategies for preventing on-the-job accidents and injuries.

Both projects were planned and implemented with input from a 14-member committee of special education professionals and teacher aides representing early childhood, preschool, lower elementary and upper elementary, secondary, and categorical and noncategorical young adult programs in seven buildings. The Planning Committee provided input in developing a safety training videotape by assisting in scriptwriting, review and modification of rough edits, and participation in filming.

Teacher aides who understand behaviors, conditions, and strategies that prevent accident and injury to special education personnel will demonstrate consciousness of safety issues through attention to potentially hazardous situations and behaviors and observation of related precautions. The heightened consciousness of teacher aides in regard to personnel safety will be transmitted to all staff who, consequently, will become more aware of safety considerations.

This project has the potential to reduce accidents and injuries to personnel in programs of special education within the 56 local school districts of Nassau County. BOCES provides in-service development to professional staff (special education teachers, teacher aides, and related service personnel such as occupational therapists, physical therapists, speech therapists, social workers, psychologists, and guidance counselors) through in-service and college credit courses, workshops, on-site programs, informational and referral assistance, and film and videotape loans.

C. Project Description

1. Target Group

Students who attend Nassau BOCES special education programs are more seriously handicapped, disruptive, volatile, and acting-out than their counterparts in special education programs provided within the local districts. Nassau BOCES relies heavily on the services of teacher aides who provide assistance in managing the severely handicapped students, i.e., toileting, dressing, escorting, and bussing.

Between September 1988 and February 1989, Nassau BOCES hired 136 new regular and substitute special education teachers and teacher aides, of whom nearly none had previous experience with special education youngsters. The project provided orientation and safety training for 166 teacher aides. Moreover, the project is expected to impact upon an additional 395 teacher aides and an additional 664 special education personnel, including 382 teachers, 64 substitute teachers, and 218 substitute teacher aides who work for the Nassau BOCES Division of Special Education.

Approximately two-thirds of teacher aide candidates who apply for employment have been out of the work force for a number of years while they raised a family. Although many of these applicants have prior experience volunteering in the schools, they have had neither formal theoretical training nor practical orientation to special education. Most applicants have never been exposed to the population of children with severe handicaps that attend programs at Nassau BOCES.

The remaining one-third of the applicants for teacher aide positions are either former teachers who have been out of the work force and have permitted their certifications to lapse, or they are bachelors' degree students who are pursuing teaching certification in evening programs while obtaining work experience during the day. Attendance in education programs does not assure familiarity with safety awareness because college and/or university programs address safety only from the point of view of children's safety, not from the viewpoint of preventing accidents or injury to personnel.

Inasmuch as college and university teacher education programs offer no preparation in personnel safety, issues, even those teacher aides who completed teaching certification in the past or who are currently completing certification, have had no training concerning procedures to protect their safety on the job.

2. Project Objectives

The purpose of the project was to prevent accidents and injuries to special education teacher aides.

Project objectives were as follows:

Objective 1: To develop a turnkey safety orientation and training model for teacher aides employed in special education programs, utilizing teams of trainers composed of one special education professional and one teacher aide.

Objective 2: To adapt safety orientation and training materials in order to expand their usefulness to aides working with unique populations of special education students.

Objective 3: To implement the training program at 7 sites, providing training to 100 teacher aides.

Objective 4: To produce a trainers' manual for peer-based turnkey safety orientation and training.

Objective 5: To disseminate the turnkey training model, the **Information Handbook for Teacher Aides**, a trainers' manual, and the safety orientation and training videotape within the Nassau BOCES special education program, to special education programs in the 56 school districts, and to other special education programs in New York State.

Figure 1 presents the program plan chart.

3. Work Plan

Training and program development activities were implemented as planned and on schedule. The Project Coordinator monitored the project to determine that tasks were implemented on time according to the activities timeline. Quarterly reports addressed the extent to which the mechanisms were in place for achieving project objectives.

In the first month, project staff was hired and the turnkey training teams were selected by principals at the participating schools.

In the second month, the information specialist and the special education program development specialist met with one another and also with the teams of trainers to solicit input on expanding the **Information Handbook for Teacher Aides** for use with unique new special education student populations and to plan the turnkey training.

In the third month, seven teams of turnkey trainers attended a 2-day orientation and constant training session to learn the training model strategies for peer-based training. Training of 166 teacher aides at the seven designated sites took place in the third month and fifth month.

Figure 1 Program Plan Chart

Operational Objectives	Activities	Evaluation
1. To develop a turnkey safety orientation and training model for teacher aides employed in special education programs, utilizing teams of trainers composed of one special education professional and one teacher aide.	Information Specialist, Educational Consultant, planning team, and special education professional will develop a safety orientation and training model with ongoing input from administrators, special education teachers, and teacher aides.	Documentation of planning and development activities.
2. To adapt safety orientation and training materials in order to expand their usefulness to aides working with unique populations of special education students.	Educational Consultant will adapt training materials with input from planning team and special education professional. Modifications will be made as needed.	Assessment of training materials based on relevance, clarity, effective use of teaching materials, appropriate methods, effective use of examples, etc.
3. To implement the training program at 7 sites, providing training to 100 teacher aides.	Peer-based training teams will provide ten hours of safety orientation and training to 100 teacher aides at 7 Nassau BOCES sites.	Assessment of orientation and training. Pre-posttests on safety skills and knowledge will be developed and administered to a sample of participants. Comparison of accidents and injuries to special education personnel pre- and posttraining
4. To produce a Trainers' Manual for peer-based turnkey safety orientation and training	Assisted by the Educational Consultant, the Special Educational Professional, and the Evaluation Consultant, the Information Specialist will compile the Trainers' Manual.	Documentation of development of Trainers' Manual. Production of the Trainers' Manual.
5. To disseminate the turnkey training model, Safety Training Handbook, Expanded Safety Training Handbook, Trainers' Manual, and the safety training videotape (developed in Year 1) within the Nassau BOCES special education program, to special education programs in the 56 school districts, and to other special education programs in New York State.	Disseminate project materials Participate in conferences. Provide information to NYS Education Department Provide technical assistance and support to districts. Provide information to parents, professional groups, service providers, public school staff, and agencies.	Documentation of dissemination activities. Dissemination lists.

In the fourth month, the development specialist conducted site visits at the seven sites to meet with training teams and school principals.

In the fifth month, 166 teacher aides who were trained through this turnkey program completed assessment instruments which had been developed in the second and third project months.

The **Information Handbook for Teacher Aides** was developed in the fifth through ninth project months. As part of the development process, the special education program development specialist and the trainers met for a period of three days to evaluate the training sessions and identify training needs. In the tenth and eleventh project months, the training materials which were developed were complied into an **Information Handbook for Teacher Aides.**

Dissemination activities began at the beginning of the grant year and continued throughout the project. Dissemination activities, involving the distribution of project products, were conducted in October 1990.

Upon completion of project activities, this final report was produced based upon data collection which was ongoing during the project. Figure 2 presents the activities timeline.

4. Project Staff

The training model was developed through a team effort, utilizing the knowledge and skills of project staff with diverse expertise and the skills of the school-based special education professionals and teacher aides.

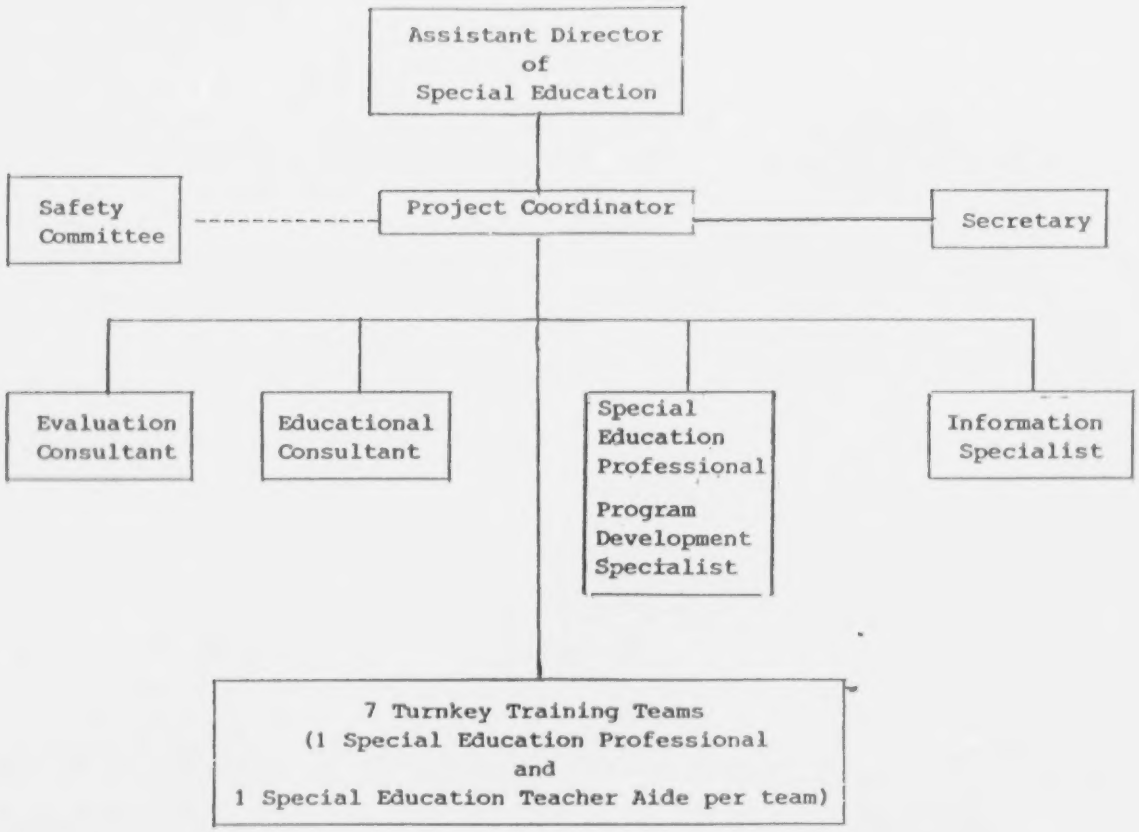
The information specialist had expertise in special education behavior management, identification of potentially dangerous behavior of handicapped children, and modification of potentially dangerous situations. The special education program development specialist had expertise in staff development and supervision. The information specialist and special education program development specialist used input from the training teams. The Safety Committee, consisting of BOCES administrators and representatives of insurance firms, served in an advisory capacity to this 12-month project.

Figure 3 presents the Project Management Chart.

Figure 2. Activities Timeline

	1989							1990				
	1 JULY	2 AUGUST	3 SEPT.	4 OCT.	5 NOV.	6 DEC.	7 JAN.	8 FEB.	9 MARCH	10 APRIL	11 MAY	12 JUNE
Hire project staff and select turnkey training teams	X											
Adapt safety training materials	X											
Develop turnkey training model	X	X										
Train turnkey training teams			X									
Implement turnkey training model			X		X							
Develop assessment instrumentation		X	X									
Conduct assessment					X							
Analyze data						X					X	
Quartly reports to the Division of Safety and Health, NYS Dept. of Labor					X			X				
Dissemination	X	X	X	X	X	X	X	X	X	X	X	X
Make available safety training materials to 56 Nassau County school districts												X
Final evaluation report												X

Figure 3. Project Management Chart



II. PROJECT EVALUATION

A. Evaluation Plan

The Nassau BOCES Office of Institutional Research and Evaluation conducted the evaluation for this project. The project coordinator was responsible for overseeing data collection.

Program evaluation included comparison of numbers and types of accidents and injuries pre- and post-training, and also comparison of numbers and types of accidents and injuries in the buildings where the training took place and in the buildings which had no safety training program.

The evaluation questions, activities, and procedures for each objective are outlined below:

B. Objective 1: Turnkey Training Model

Evaluation Question 1 asked: "Was a turnkey safety orientation and training model, utilizing teams of trainers composed of one special education professional and one teacher aide, developed for teacher aides employed in special education programs?"

The turnkey safety orientation and training model was developed and implemented utilizing teams of trainers at each of the seven sites impacting directly upon 166 teacher aides.

The turnkey training concept provided for involvement of the target population in project planning, implementation, and assessment. A team of peer trainers consisting of one special education professional and one teacher aide was selected by the site administrator from each of the seven training sites. These 14 peer trainers participated in three days of planning and training prior to the beginning of the school year and provided 1 1/2 days of safety training to the special education teacher aides at their own building sites. A combination of training approaches including lectures, videotapes, deomonstrations, discussions, and field experience. The peer training teams assessed the trainings and provided input for the development of a **Information Handbook for Teacher Aides.**

Topics included in the Safety Training Program were as follow:

- Clarifying the roles of part-time, full-time, and substitute teacher aides (**Information Handbook**, pages 12-14).

- Developing guidelines for sharing students' medical histories and/or special characteristics, particularly in regard to seizures (Training sessions).

- Identifying behaviors or characteristics which may be anticipated from children of varying ages and varying disabilities (Training sessions and **Information Handbook**, pages 3-10).

- Developing observation skills and sensitivity to alterations in children's behavior (**Information Handbook**, page 17).

- Anticipating hazardous times of day, i.e., transition periods, bus duty, recess (Training sessions and **Information Handbook**, page 17).

- Dressing appropriately for safety, i.e., footwear, jewelry (Training sessions and **Information Handbook**, page 11).

- Avoiding confrontation and conflict (Training sessions).

- Crisis intervention and managing the "time-out room" (**Information Handbook**, pages 15-16, 19-20).

- Methods for restraining disruptive youngsters (Training sessions).

- Managing tension and stress (Training sessions).

- Bending and lifting (Training sessions and **Information Handbook**, pages 24-26).

- Avoiding communicative disease, i.e., head lice (Training sessions).

Major subject areas included:

- Identifying potentially hazardous situations (**Information Handbook**, pages 27-31).

- Recognizing hazardous situations which may be associated with particular student disabilities (**Information Handbook**, pages 3-10).

- Predicting student behaviors in specific situations (**Information Handbook**, pages 3-10).

- Applying problem-solving skills, selecting alternatives, and taking appropriate action to avert potentially hazardous situations (Training session, **Information Handbook**, pages 15-23, 33-34).

- Communicating effectively in emergencies (Training sessions).

- Developing safe work habits, behaviors, and skills (Training session, **Information Handbook**, pages 17-20, 31-34).

C. Objective 2: Materials for Unique Populations

Evaluation Question 2 asked: "Were materials for safety training of teacher aides adapted to expand their usefulness to aides working with specific unique populations of special education students?"

An expanded **Information Handbook for Teacher Aides** was developed and adapted to meet the needs of teacher aides working with unique special education students as described above (e.g. preschoolers, students with vision and/or hearing impairments). Content of the **Information Handbook for Teacher Aides** consisted of a description of special education populations, analysis of accidents and injuries to special education personnel, and prevention of accidents and injuries to personnel.

The first two sections of the **Information Handbook** provided a brief orientation to the field of special education and focused on special education populations to acquaint teacher aides with the nature, needs, hearing of the specialized populations with which they will be working. The **Information Handbook** presented specific behaviors, both academic and social, that may be exhibited by special populations, enabling teacher aides to understand and appreciate why the students may be engaging in such behaviors.

Also, the **Information Handbook** presented behaviorial techniques and strategies applicable to particular situations and specific interactions for a wide variety of student behaviors that may cause accident or injury. The handbook identified potential crisis situations, and intervention techniques, which would assist teacher aides to maintain a positive classroom environment, reduce disruptive behaviors, and manage crisis situations.

The videotape used an investigative reporting documentary format similar to a "60 Minutes" segment. A narrator introduced the occupation of teacher aide in a special education program and, using descriptive data of accidents and injuries, placed this occupation in context as a hazardous occupation. Interviews with teacher aides corroborated the narrator's data, confirming the need for safety orientation and training of teacher aides. The videotape presented simulated classroom situations to demonstrate common hazards to personnel safety and to pose solutions for reducing risk of accident and injury to special education personnel.

D. Objective 3: Provision of Training

Evaluation Question 3 asked: "Was the training program implemented at 7 sites, providing training to 100 teacher aides?"

Seven two-person peer training teams who were selected by building administrators represented the following seven sites:

- Rosemary Kennedy School. Upper school. Severely and profound developmentally impaired (trainable mentally retarded).
- Rosemary Kennedy School. Lower school. Severely and profound developmentally impaired (trainable mentally retarded).
- Rosemary Kennedy School. Preschool. Multisensory hearing impaired.
- Rosemary Kennedy School. Preschool to Age 21. Program for vision impaired.
- Ames School. Lower Elementary. Noncategorical
- Fern Place. Lower Elementary. Noncategorical
- Jericho Preschool. Noncategorical

The trainers attended a two day training session prior to the beginning of the school year in September 1989.

The training model consisted of two parts: (1) training of seven two-person training teams and (2) training of 166 special education aides at seven sites by the training teams.

Training of the 166 aides at the seven sites was conducted in 2 sessions: one orientation session in September and one full-day session in November. (These sessions corresponded with school days reserved for non-teaching duties.) Training strategies included the use of site-specific examples, discussion, role-playing, and summaries of material to maximize understanding, reinforce, and emphasize safety consciousness of teacher aides.

Orientation provided an overview of handicapped populations and types of accidents and injuries which threaten the safety of special education personnel. An orientation video (developed from a previous grant) was used. Teacher aides completed a survey describing the most recent work related accident or injury they had experienced. Data obtained from the survey was used to plan a second, full-day training session.

A full-day training session on November 6, 1990 utilized materials specifically developed to meet the needs of teacher aides working with unique populations of special education students at participating schools, e.g., preschoolers, students with visual

and/or hearing impairments. Handouts were assembled and distributed to help teacher aides anticipate and meet medical emergencies, prevent spread of communicative diseases, manage interactions with special education students in classrooms and lunchrooms, recognize and provide first aid to students with epileptic seizures, and prevent back injuries.

Upon conclusion of the training sessions, teacher aides completed an evaluation instrument to assess the safety orientation and training on various criteria including relevance, appropriate training methods, clarity of presentation, clearly expressed educational philosophy, effective utilization of teaching materials, use of examples, identification of strengths and weaknesses, program specific adaptations, opportunity for participation, appropriate use of feedback, outlines of important material to emphasize teacher awareness and safety, summaries to maximize understanding and reinforcement, reasonable performance expectations, appropriate assessment and evaluation materials, and satisfaction with the training program.

More than nine-tenths of responding teacher aides rated the workshops "high" or "highest" on the following criteria:

- Effectiveness of presenter
- Relevant examples and demonstration
- Expertise/knowledge of persenter
- Materials and visual aids

More than four-fifths of the respondents rated the workshops "high" or "highest" on:

- Encouraged discussion
- Responsive to participants
- Appropriate pacing
- Relevant to participants

Nearly nine-tenths of the respondents rated their overall satisfaction with training as "high" or "highest."

Table 1 presents the mean ratings for all criteria relating to organization and content and the percentage of respondents rated criteria "high" or "highest".

Table 1

Organization and Content of Safety Training Workshop

Criteria	(n)	Mean Rating*	Percentage rated "high" or "highest"
Effectiveness of presenter	(163)	4.7	94%
Relevant examples/demonstrations	(163)	4.7	94
Expertise/knowledge of presenter	(163)	4.7	92
Materials and visual aids	(163)	4.7	92
Encouraged discussion	(166)	4.6	88
Responsive to participants	(166)	4.6	88
Appropriate pacing	(166)	4.4	86
Relevant to needs	(166)	4.4	84
Comprehensive content	(166)	4.4	75
Scheduling of session	(166)	3.2	25
Overall satisfaction	(166)	4.6	88

* Rated on a scale of 5 = highest to 1 = lowest

Participants' ratings of the training on three criteria related to effectiveness indicated that workshop participation increased participants' safety skills, their knowledge of concepts and content, and their awareness of the significance of the topic (Table 2).

Table 2

Effectiveness of Safety Training Workshop

Area of decreased professional development	(n)	Mean Rating*	Percentage rated "high" or "highest"
Safety skills	(166)	4.9	100%
Knowledge of concepts and content	(163)	4.7	94
Awareness of topics significance	(163)	4.7	89

* Rated on a scale of 5 = highest to 1 = lowest

Elements of the safety training which participants felt were particularly useful included the following:

- Crisis intervention strategies
- Increased personal safety
- Understanding of personality and handicaps
- Strategies of developing discipline regulations
- Sharing experiences
- Teacher-aide cooperation
- Brainstorming suggestions
- Strategies for relating to children and individuals
- Access to student records

Recommendations for improving workshops included better scheduling, increasing time for training, and including school principals in discussions.

E. Objective 4: Trainers' Manual

Evaluation Question 4 asked: "Did the project develop a trainers' manual for peer-based safety orientation and training?"

Project staff addressed the issue of the development of a trainers' manual and decided that it would be more effective to develop a single handbook for trainers and participants since the material would be duplicated in separate handbooks.

F. Objective 5: Dissemination

Evaluation Question 5 asked: "Have a trainers' manual and safety orientation and training materials been disseminated within the Nassau BOCES special education program, to special education programs in the 56 school districts of Nassau County, and to other special education programs in New York State?"

The **Information Handbook for Teacher Aides** which was developed by this project can be used by special education programs locally, statewide, and nationally. The training process was documented so as to provide a model for replication by similar ventures in other regions throughout the country.

The peer-based turnkey safety training model, the safety orientation videotape, and the **Information Handbook for Teacher Aides** have been disseminated within the Nassau BOCES special education program, to special education programs in school districts of Nassau County on request, and to other special education programs in New York State. Documentation of dissemination activities was maintained by the Project Coordinator who kept lists of requests for information and materials and of sites to which materials were sent.

In addition, dissemination was accomplished by participation in local, regional, and national conferences of professional associations; providing information and materials to the New York State Education Department for statewide dissemination; offering technical assistance and support to other local and regional efforts through the Special Education Training and Resource Center (SETRC) and the Cooperative Staff Development programs (CSD); providing information and materials to parents, professional groups, service providers, public school staff, and agencies in other areas in order to promote safety awareness and replication of the project model; and preparing materials for inclusion in the SPECIALNET electronic database and the ERIC Clearinghouse. Nassau BOCES provides technical assistance and staff development to subscribing local school districts through in-service and college credit courses, workshops, and on-site programs, and provision of resources and information. The accessibility of Nassau BOCES to the activities of the component districts within the region provides a powerful means of dissemination and exportation of special project activities.

G. Summary of Impact

The project developed materials and provided training to enhance the knowledge and skills of teacher aides concerning behaviors, conditions, skills and strategies for preventing accidents and injury to special education personnel.

It was hypothesized that there would be a decline in the number of accidents and injuries to special education personnel (particularly in those buildings where the safety orientation and training materials were field tested) relative to the number of accidents and injuries to personnel in other divisions of Nassau BOCES. To test this hypothesis, data was collected for numbers and types of accidents and injuries to BOCES personnel pre- and post training to determine the extent to which this pilot program was associated with reduction in safety incidents. Baseline data was collected for a nine-month period prior to program implementation (1/11/87 to 10/23/87) and compared to the eight-month period after program implementation to the end of the school year (11/1/89 to 6/30/90).

The total number of accidents reported by all personnel in the Division of Special Education decreased substantially after the safety training was implemented as indicated below:

Total accidents before training = 61
Total accidents after training = 48

There was a decrease, also, in the severity of injury reported by personnel in the Division of Special Education, especially among teacher aides in buildings participating in safety training in either year 1 or year 2. This improvement is indicated both by the type of injuries sustained and the number of work days lost due to injury or accidents.

Type of injury: Before training, four-fifths of accidents and injuries to teacher aides involved the back, head, or neck. After training, only one-half of injuries to teacher aides at participating schools involved employees' backs, heads, or necks.

Workdays lost: According to the 1988-89 safety training evaluation report, personnel in the Division of Special Education lost 98 workdays due to accidents. These 98 workdays accounted for nine-tenths of all workdays lost due to accidents involving BOCES personnel. The report concluded that prior to training "... apparently accidents and injuries involving special education personnel were more severe, requiring disproportionately more absence than accident and injuries which involved other divisions of Nassau BOCES." After implementing this project in 1989-1990, workdays lost due to accidents by special education personnel accounted for 82% of all work days lost due to accident by BOCES personnel.

The impact of the project on teacher aides who were trained in the safety program during both years of safety training is evidenced by comparing the average days lost due to accidents and injuries among teacher aides at participating buildings compared to other Nassau BOCES personnel. After turnkey training the teacher aides at participating schools on the average lost only half the number of workdays per injury (6 days) as did other special education personnel (12 days). The average number of days lost per injury among teacher aides at participating schools was only slightly higher than the average number of days lost per injury by personnel in all other BOCES divisions (5 days).

The average number of work days lost due to accidents and injuries for three groups of BOCES employees is presented in Table 3.

Table 3

Work Days Lost Due to Accidents and Injuries by Nassau BOCES Employees*

	Average number of days lost due to injury	Median number of days lost here to injury	Percent of injuries resulting in lengthy absence (20 or more days)
Teacher aides at participating schools	6	4	11%
All other special education personnel	12	6	32
All other Nassau BOCES personnel	5	4	9

* Includes all injuries where employee returned to work.

Using a different statistic, the median number of work days lost per accident was 4 days for special education teacher aides in participating schools and also personnel in all other BOCES divisions; the median number of workdays lost per accidents was one-third higher for participating special education personnel (6 days per accident).

An even greater disparity is seen by comparing the percentage of injuries and accidents resulting in lengthy absences, defined as 20 or more workdays lost. While special education teacher aides in participating schools and Nassau BOCES personnel in all other divisions had only a small percentage of accidents resulting in lengthy absences (11% and 9% respectively), other personnel in the Division of Special Education (who were not participants in this project) were three times as likely to have accidents resulting in 20 or more work days lost (32% of all accidents).

In conclusion, the safety training program for teacher aides was effective in reducing both the number and severity of accidents in schools. Where training was implemented, special education teacher aides were no more likely to have severe accidents than personnel in other BOCES divisions.